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Legal Regulation of the Cooperative Control to the Ship Atmospheric Emissions in China

When shipping and anchoring at the ports, ships emit a great deal of atmospheric pollutant and GHG which do harm to atmospheric environment and human's health. Generally, atmospheric pollutant emission belongs to the scope of the prevention of atmospheric pollution, and GHG emission belongs to the scope of addressing climate change. However, the atmospheric pollutant and GHG emission from ships have the same characters. So they should be controled cooperatively. We should use the legislative and practical experience of IMO, European and American countries for reference to improve relavant legislations and enhance the legal regulation on the cooperative control on ship atmospheric emission.

Keywords: ship emissions; atmospheric pollutants; GHG; cooperative control; legal regulation

With the implementation of the ship energy efficiency rules of Annex VI of MARPOL , the international community began to control the atmospheric pollution from ships cooperatively and many countries began to enact and revise relevant legislations and policies, and make some active technical innovation to meet the requirement of international rules. We should enact relevant legislations about ship emissions and some ship technical standards and fuel atandards to adopt the tendency of international shipping legislation.

1 Coordinate relevant legislations and clarify the legislative orientation

The GHG emissions from ships belong to the realm of combatting climate change and the atmospheric pollutant emissions from ships belong to the realm of atmospheric pollution prevention. And they all belong to the realm of enveronmental protection law macroscopically. Therefore, to control atmospheric emissions from ships cooperatively, we should coordinate relevant legislations on the atmospheric pollution prevention and climate change combatting. We should establish a set of perfect legal system about the cooperative control to ship atmospheric emissions with series of comprehensive environmental protection legal regime, based on "Environmental Protection Law", and supplemented with some other legislations on environment, resources and energy such as "Atmospheric Pollution Prevention Law", "Climate Change Response Law", "Water Pollution Prevention Law" and "Saving Energy Law". At present, "Climate Change Response Law" has not been adoppted in China. The deficiency of special legislation of ship GHG emissions requires the functional substitution by the current legislations, and "Atmospheric Pollution Prevention Law" is the optimal choice.²⁹⁷

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²⁹⁷ Yao Ying. Approach on regulating GHG emissions by the law of the People's Republic of China on the Prevention and Control on Atmospheric Pollution[J].Environmental Protection. 2014,42(18):55-57.

The Article 1 of “Atmospheric Pollution Prevention Law” illustrates the legislative goal that is to prevent and control atmospheric pollution, protect and improve living and ecology environment, insure human health and promote the sustainable development of economy and society.”The Revision Amendment” changes some expression, but the overall orientation has not been changed. According to the Article 1 of “Exposure Draft”, its main legislative goal is to control and reduce GHG emissions, cope with global and regional climate change scientifically and promote the sustainable development of China’s economy and society. “Atmospheric Pollution Prevention Law” regulates atmospheric pollutant emissions while “Climate Change Response Law” regulates GHG emissions. Their regulated objects and legislative orientation location are different and they should perform their duties and regulate in their own fields. And they should devote to atmospheric pollution control cooperatively.

2 Clarify the principle of cooperative control and coordinate development

Article 2 of “The Revision Amendment” provides that to prevent and control atmospheric pollution should enhance the comprehensive prevention and control on coal, industry, motor vehicles and ships, dust and other atmospheric pollution, and control GHG and atmospheric pollutants cooperatively including PM, inhalable particle, SO₂, NO_x, and so on. Article 4 of “Exposure Draft” provides that tackling climate change should persist in the principles of green and low-carbon development, plan climate protection as a whole, coordinative development of economy and society. And Section 2 of Article 2 provides that if the GHGs emitted belong to atmospheric pollutants, the regulations of atmospheric pollution prevention can be applied to the concrete supervised measures to the GHGs control. It is thus clear that both laws realize the importance of the cooperative control on the atmospheric pollutant prevention and GHG emission reduction, and they both illustrate the principle of cooperative control in the part of general provisions. It establishes a strong legal and systematic foundation to control atmospheric pollutants and GHG emissions from ships cooperatively.

3 Define the concepts of GHG and atmospheric pollutant explicitly

The current “Atmospheric Pollution Prevention Law”, “The Revised Draft” and the abolished “Detailed Rules of Atmospheric Pollution Prevention Law” all described the issue of prevention of atmospheric pollution, but none of them defined the concepts of “atmospheric pollution” and “atmospheric pollutant” explicitly. We should use the definition of “atmospheric pollution” in “The Interpretation of Atmospheric Pollution Prevention Law” published by the Standing Committee of the National People’s Congress for reference. So-called atmospheric pollution is that due to human activities, some substances come into the atmosphere and reach to a certain concentration, consequently it can result in the change of the character of its chemical, physical, biological or radioactive aspects and generate the degradation phenomenon of atmosphere quality including doing harm to human health, destroying ecology environment and damaging material wealth.

China is now enacting the legislation about tackling climate change and there is no legal definition of GHG. Article 113 of “The Exposure Draft” provides that GHG is such a kind of gas that can be generated from human activities and enter into atmosphere environment, which can result in global and regional climate warmer. The GHGs in this concept include six GHGs listed in “Kyoto Protocol” and other gas substances announced by some authorities. Because carbon black is a kind of atmosphere particle which can make global or regional climate warmer, it is also treated as GHG. The author thinks that the concept of GHG is somehow partial, because it only concentrates the gas which can result in climate warmer from human activities, and neglects such GHGs that are

originally in the atmosphere naturally. With the increasing of the human emissions into the atmosphere from human activities, the concentration of GHGs in the atmosphere exceeds the bearing extent of the atmosphere which can generate greenhouse effect or do harm to human health. Thus, it is necessary to reduce GHG emissions. However, even so, whether or not the GHG beyond the bearing limit can be called atmospheric pollutant still needs to be discussed. Therefore, the definitions in Section 2 of Article 2 and Section 2 of Article 13 of “The Exposure Draft” are somehow impartial, because they define a part of GHGs as atmospheric pollutants and submit them to the regulation by “The Atmospheric Pollution Prevention law”. But they don’t define what is atmospheric pollutant and which kind of GHG can be treated as atmospheric pollutants, it can result in the difficulty in practice. So we should use the concept of GHG in IPCC “the 3rd Assessment Report” as reference.

Although America revised “Clean Air Act” through the judicial precedent of Supreme Court in 2009 and treated GHG as “atmospheric pollutant” and make it the regulated scope of the Act, actually it was a kind of strategy in American low-carbon development. America only treats GHG as “atmospheric pollutant” and controls it as “atmospheric pollutant” without mixing the two substances in concept. Therefore, even though we should control atmospheric pollutants and GHG emissions from ships cooperatively, we still need to clarify the two concepts and their difference. And if it concerns their transformation, we should define the reasons and scopes of the transformation in relevant legislations.

4 Set up ECAs

There are still not perfect national standards on the atmospheric pollutant emissions from ships. We should refer to relevant provisions and standards in MARPOL such as some technical standards on NO_x and SO₂ emission reduction from ships in Chapter 3 of the Annex VI of MARPOL. We should regulate atmospheric pollution prevention from ships and provide concrete ship pollutant emission standards. We also can refer to PARPOL and set up several ECAs in coastal and inland water shipping areas in which the population is density, shipping is busy and the pollution is more serious. And the sulphur content standard in fuels should be different between inside and outside of ECAs in order to reduce the atmospheric pollutant emissions from ships such as NO_x and Sox.

5. Conclusion

“The 3rd IMO GHG Study 2014” approved by the 67th session of MEPC in October 2014 provided updated estimates for global GHG emissions from ships: international shipping emitted 796 million tonnes of CO₂ in 2012, against 885 million tonnes in 2007. This represented 2.2% of the global emissions of CO₂ in 2012, against 2.8% in 2007. Although the amount and the percentage of GHG emissions in 2012 declines compared with 2007, but according to IMO’s prediction, with the development of economy and energy utilization, international shipping emissions will be increased by 50---250%.²⁹⁸ On March 6th, 2015, the launch meeting of the project “The Policy Research on the Cooperative Control on Tackling Climate Change and Atmospheric Pollution Control” was held in Beijing. This project aimed to do some systematic research on the issue of the cooperative control on climate change and atmospheric pollution in China. Especially, the project will analyze the issues of prevention and control to short-life climate pollutants and non-road moving source pollutants which have already been listed in the bilateral

²⁹⁸ IMO’s MEPC progresses work on air pollution and energy efficiency [EB/OL]. (2014-10-24) [2014-12-02] <http://www.imo.org/MediaCentre/PressBriefings/Pages/34-mepc-67-emissions.aspx#.VE7brXlxdg>.

cooperation plan between China and America. The project will provide scientific basis for setting out the policy framework of the cooperative control to climate change and atmospheric pollutants.²⁹⁹ At present, China is revising “Atmospheric Pollution Prevention Law” and drafting “Climate Change Response Law”. We should take advantage of this opportunity to regulate atmospheric pollution from ships. Since China has not adopted “Climate Change Response Law”,³⁰⁰ we should develop the cooperative control on the atmospheric emissions in the revision of “Atmospheric Pollution Prevention Law”. First, we should clarify the difference between GHG and atmospheric pollutant; and then make the cooperative control on atmospheric pollution as a basic principle. Furthermore, we should refer to the IMO’s practice of setting up ECAs and set up several ECAs in coastal and inland water shipping areas and set up different sulphur content standards of fuel inside and outside of ECAs to reduce the atmospheric pollutant emissions from ships.

²⁹⁹ The project “The Policy Research on the Cooperative Control on Tackling Climate Change and Atmospheric Pollution Control” launched [J]. *Environmental Pollution and Prevention*. 2015, 37(3):26.

³⁰⁰ “Atmospheric Pollution Prevention Law” will be revised completely for the first time for 27 years [J]. *Environmental Pollution and Prevention*. 2015, 35(1):6.